

A.	CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITIONS AND THESE DRAWINGS.
В.	COORDINATE ALL FIRE PROTECTION INSTALLATION WITH GENERAL, PLUMBING, VENTILATION, AND ELECTRICAL CONTRACTORS. INSTALL ALL FIRE PROTECTION PIPING AS HIGH AS POSSIBLE. PROVIDE ALL NECESSARY OFFSETS (DROPS AND RISES) TO KEEP FIRE PROTECTION PIPING TIGHT TO THE STRUCTURE OR DUCTWORK ABOVE. OFFSET FIRE PROTECTION PIPING TO AVOID BEAMS AND INSTALLATION BY ALL TRADES.
C.	ALL FIRE PROTECTION WORK SHALL ADHERE TO CURRENT NFPA 13 STANDARDS.
D.	ENTIRE BUILDING SHALL BE SPRINKLED. VERIFY WHERE MULTIPLE FLOORS EXIST.
E.	FIRE PROTECTION PIPING AND SPRINKLER HEADS ARE SHOWN FOR REFERENCE ONLY.
F.	SPRINKLER HEADS IN LAY-IN-TILE CEILINGS SHALL BE LOCATED IN THE CENTER OF TILE.
G.	REFER TO AND COORDINATE WITH THE ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS, SOFFIT AREAS, AND ELEVATIONS FOR INSTALLATION OF NEW FIRE PROTECTION PIPING, SPRINKLER HEADS, EQUIPMENT, ETC.
Н.	THIS CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND RE-INSTALLING OF EXISTING CEILING TILE NOT REMOVED BY THE GENERAL CONTRACTOR FOR THE INSTALLATION OF NEW FIRE PROTECTION PIPING, SPRINKLER HEADS, EQUIPMENT, ETC. VERIFY WITH ARCHITECTURAL PLANS FOR CEILING WORK BY THE GENERAL CONTRACTOR. ANY CEILING TILE OR GRID DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH NEW BY THIS CONTRACTOR.
l.	THIS CONTRACTOR SHALL OPEN ALL EXISTING WALLS AND/OR CEILINGS FOR INSTALLATION OF NEW FIRE PROTECTION PIPING, SPRINKLER HEADS, EQUIPMENT, ETC. AS REQUIRED. PATCH WALLS AND/OR CEILINGS TO MATCH EXISTING.

. MAINTAIN 3'-0" CLEAR SPACE IN FRONT OF ALL ELECTRICAL, CONTROL, AND ACCESS PANELS FOR

SPRINKLER HEAD LEGET

BRASS PENDENT TYPE SPRINKLER HEAD

→ SIDEWALL PENDENT TYPE SPRINKLER HEAD

→ BRASS UPRIGHT SIDEWALL PENDENT TYPE SPRINKLER HEAD

₩ CHROME PLATED RECESSED TYPE SPRINKLER HEAD

O BRASS UPRIGHT PENDENT TYPE SPRINKLER HEAD

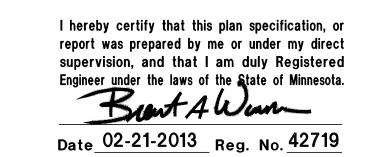
WHITE CONCEALED PENDENT TYPE SPRINKLER HEAD

FIRE PROTECTION NOTES

MOORHEAD, MN 56560



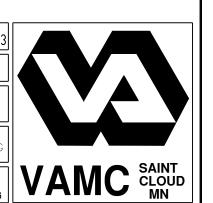


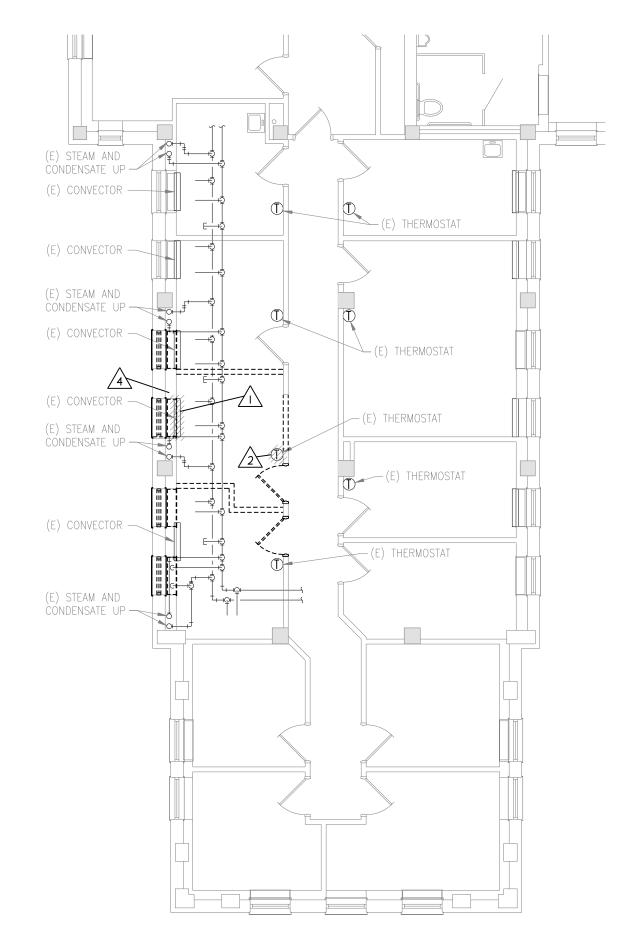


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APPROVED: SERVICE LINE DIRECTOR	DATE:	APPROVED: PATIENT SAFETY	DATE:
APPROVED: PROJECTS SECTION MANAGER	DATE:	APPROVED: CHIEF OF POLICE	DATE:
APPROVED: DIRECTOR FMS	DATE:	APPROVED: SAFETY MANAGER	DATE:

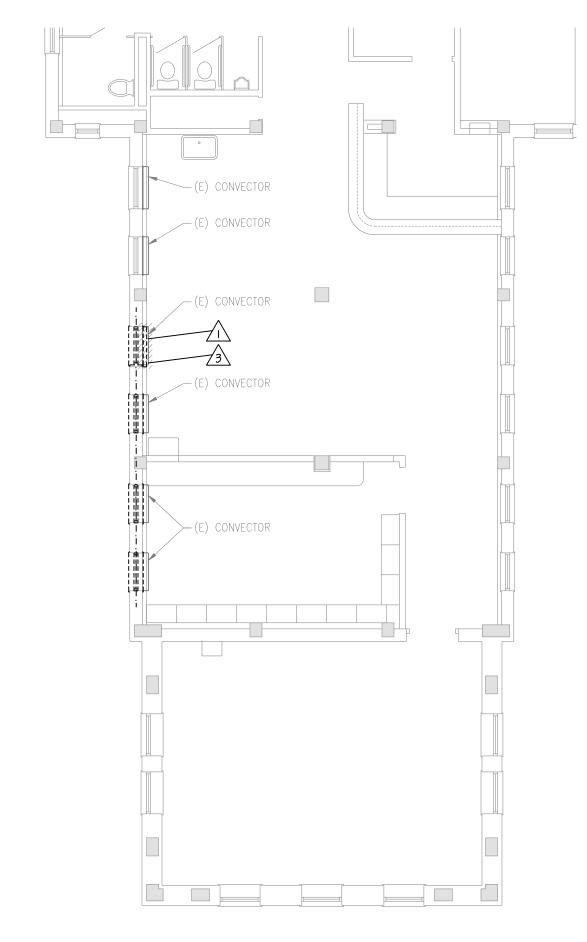
ING TITLE	PROJECT TITLE			DATE FEBRUARY 21, 2013	
E PROTECTION DEMOLITION AND IODELING PLANS	BUILDING 28			PLOT SCALE AS SHOWN	4
				PROJECT NO.	'
				2012194	
OVED: CHIEF OF STAFF DATE:	BUILDING No	CHECKED BY	DRAWN	CAD FILE	
	28	BW	MW	2012194-FP1.DWG	
OVED: MEDICAL CENTER DIRECTOR DATE:	LOCATION	CENTED		DRAWING NO.	1
	VA MEDICAL			FP1	۱ '

ACCESSIBILITY.

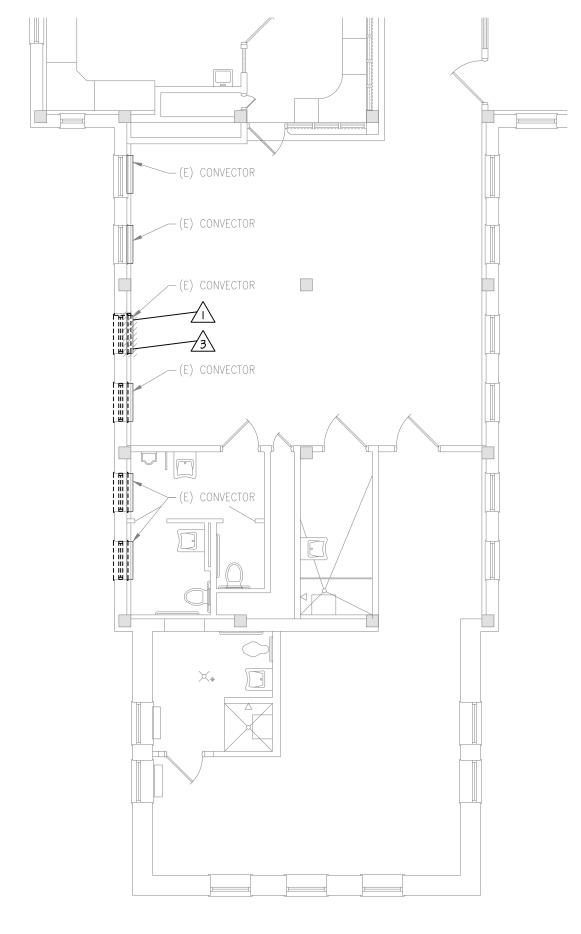






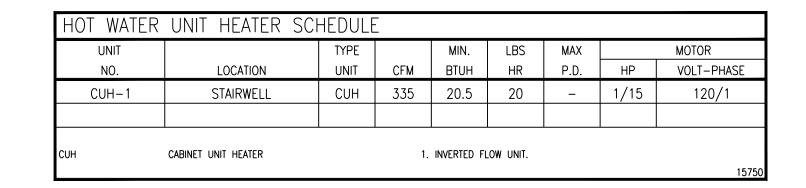


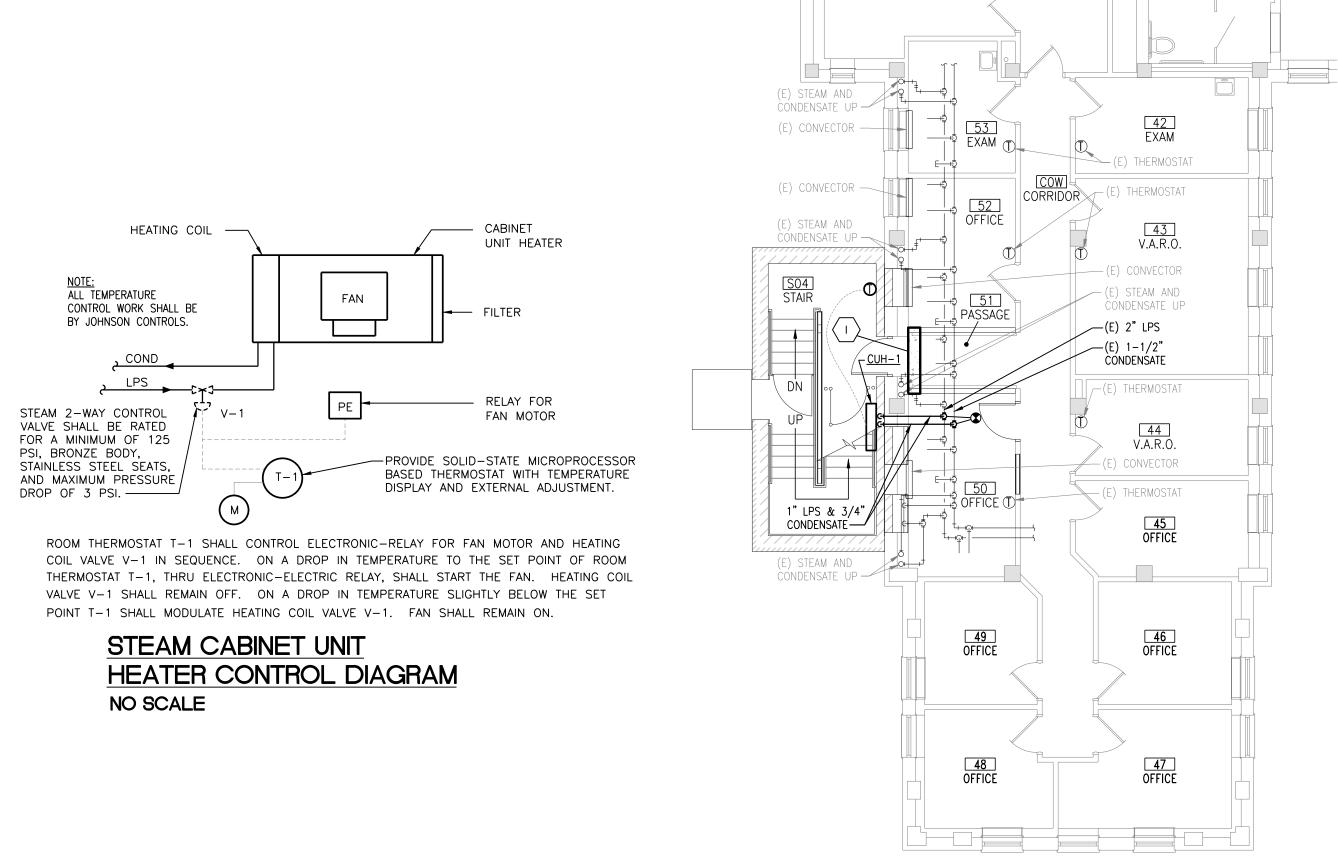
FIRST FLOOR HVAC PIPING DEMOLITION PLAN 1/8"=1'-0"



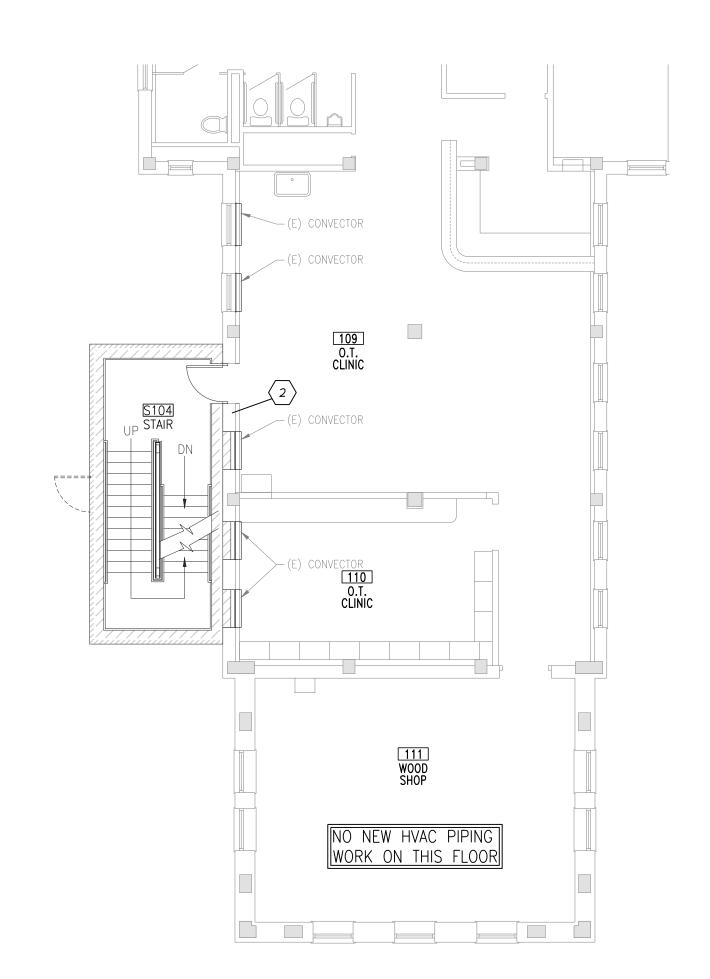
SECOND FLOOR HVAC PIPING DEMOLITION PLAN 1/8"=1'-0"

	HVAC PIPING DEMOLITION NOTES:
A.	DEMOLITION DRAWINGS ARE DIAGRAMMATIC ONLY AND ARE BASED ON FIELD OBSERVATION AND EXISTING RECORD DRAWINGS. CONTRACTOR SHALL VERIFY AL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AI NOTIFY THE ARCHITECT/ ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITION AND THESE DRAWINGS. PROVIDE ADDITIONAL DEMOLITANCE REQUIRED BASED ON FIELD CONDITIONS.
В.	THIS CONTRACTOR IS RESPONSIBLE FOR REMOVAL A RE-INSTALLING OF EXISTING CEILING TILE NOT REMOVED BY THE GENERAL CONTRACTOR FOR THE DEMOLITION OF EXISTING HVAC PIPING, EQUIPMENT, ETC. VERIFY WITH ARCHITECTURAL PLANS FOR CEIL WORK BY THE GENERAL CONTRACTOR. ANY CEILING TILE OR GRID DAMAGED DURING CONSTRUCTION SHABE REPLACED WITH NEW BY THIS CONTRACTOR.
C.	THIS CONTRACTOR SHALL OPEN ALL WALLS AND/OR CEILINGS FOR DEMOLITION OF EXISTING HVAC PIPING EQUIPMENT, ETC. AS REQUIRED.
D.	THIS CONTRACTOR IS RESPONSIBLE FOR PATCHING A HOLES/WALLS AND OR CEILINGS FROM DEMOLISHED HVAC PIPING, EQUIPMENT, ETC. IN FLOORS, WALLS, AND CEILINGS TO MATCH EXISTING.
$\triangle$	DISCONNECT AND REMOVE EXISTING CONVECTOR INCLUDING ALL ASSOCIATED CONTROLS, PIPING, VALV SUPPORTS, ETC. CAP REMAINING STEAM AND CONDENSATE PIPING AT MAIN.
	DISCONNECT AND REMOVE EXISTING THERMOSTAT INCLUDING ALL ASSOCIATED TUBING / WIRING.
/3	DOCUMENT EXISTING PIPING CONDITIONS IN THE WAL DURING DEMOLITION. RELOCATE EXISTING STEAM AN CONDENSATE PIPING TO THE FLOOR BELOW AND BAY UP AS REQUIRED FOR NEW STAIR DOOR. REMOVE AND REPLACE EXISTING CEILINGS AND REMOVE AND PATCH EXISTING WALLS AS REQUIRED FOR REROUTIN PIPING.
4	DISCONNECT AND REMOVE EXISTING STEAM AND CONDENSATE PIPING IN WALL FROM EXISTING CONVECTOR. PREPARE PIPING FOR RE-CONNECTION

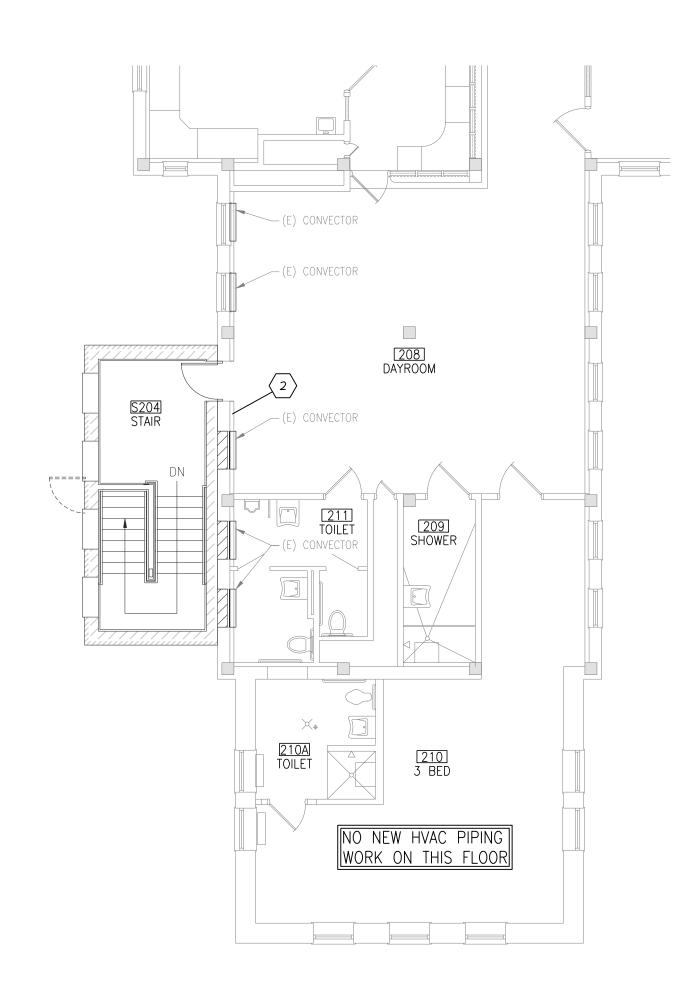




BASEMENT HVAC PIPING REMODELING PLAN
1/8"=1'-0"



FIRST FLOOR HVAC PIPING REMODELING PLAN
1/8"=1'-0"



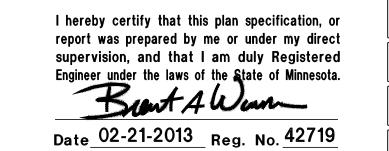
SECOND FLOOR HVAC PIPING REMODELING PLAN
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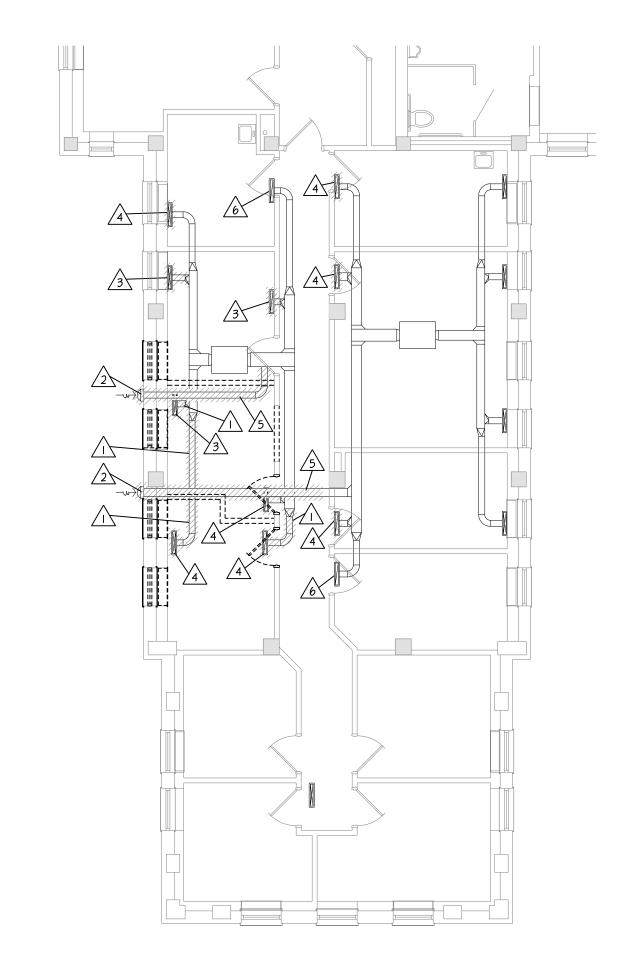






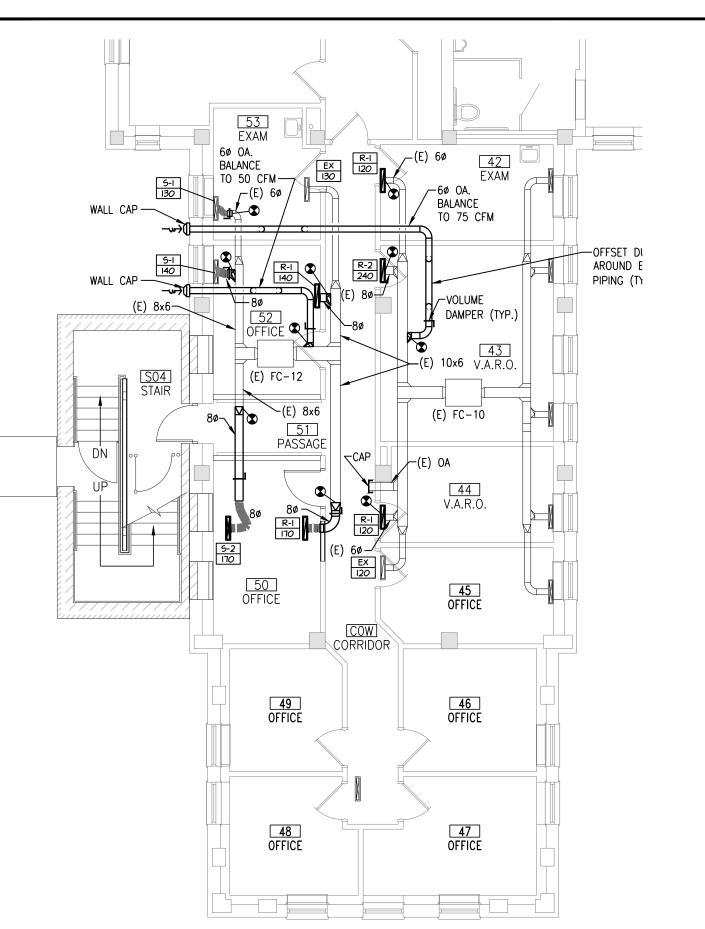
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				HVAC F
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APPROVED: PROJECTS SECTION MANAGER	DATE:	APPROVED: CHIEF OF POLICE	DATE:	APPROVED: 0
APPROVED: DIRECTOR FMS	DATE:	APPROVED: SAFETY MANAGER	DATE:	APPROVED: I

E PING DEMOLITION AND ING PLANS		PROJECT TITLE  BUILDING 28 SOUTHWEST  STAIR TOWER ADDITION		DATE FEBRUARY 21, 2013 PLOT SCALE AS SHOWN PROJECT NO. 2012194		
IIEF OF STAFF	DATE:	BUILDING No 28	CHECKED BY	DRAWN MW	<b>CAD FILE</b> 2012194—H1.DWG	
EDICAL CENTER DIRECTOR	DATE:	LOCATION  VA MEDICAL ( ST.CLOUD, MN			DRAWING NO. H1 DWG. 9 OF 13	VAMC SAINT CLOUD MN

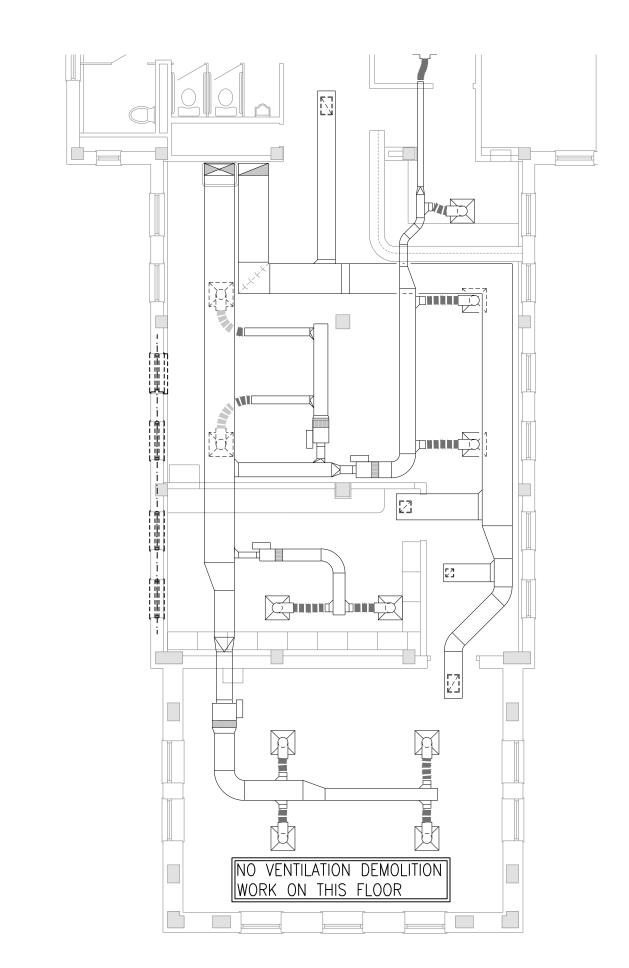


## BASEMENT VENTILATION DEMOLITION PLAN 1/8"=1'-0"

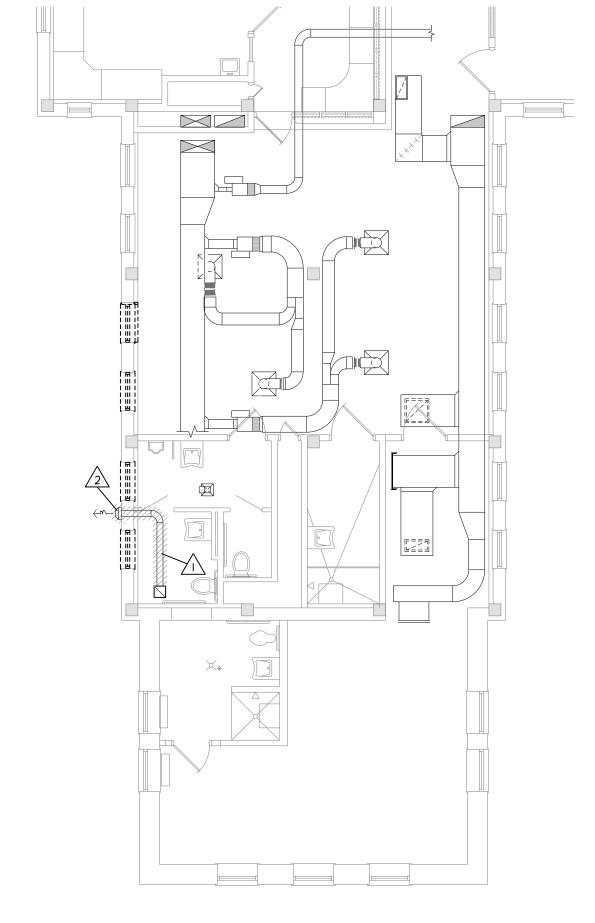
DIFFUSER, REGISTER AND GRILLE SCHEDULE								
UNIT			NECK	FRAME				
NO.	MATERIAL	TYPE	SIZE	SIZE	MOUNTING	AIR	OBD	REMARKS
S-1	STEEL	LSD	23"x3-5/8"	23"x4-1/2"	L.I.T.	SA	N	1
S-2	STEEL	LSD	23"x5-3/8"	23"x5-3/8"	L.I.T.	SA	N	2
R-1	STEEL	LSD	23"x3-5/8"	23"x4-1/2"	L.I.T.	RA	N	1
R-2	STEEL	LSD	23"x5-3/8"	23"x5-3/8"	L.I.T.	RA	N	2
LSD								
			1. 2 SLOT, 1" SLOT SPACING DIFFUSER					
					2. 3 SLOT, 1" SL	OT SPACING I	DIFFUSER	



RETURN/EXHAUST DUCT TO GRILLE DETAIL BASEMENT VENTILATION REMODELING PLAN
1/8"=1'-0"

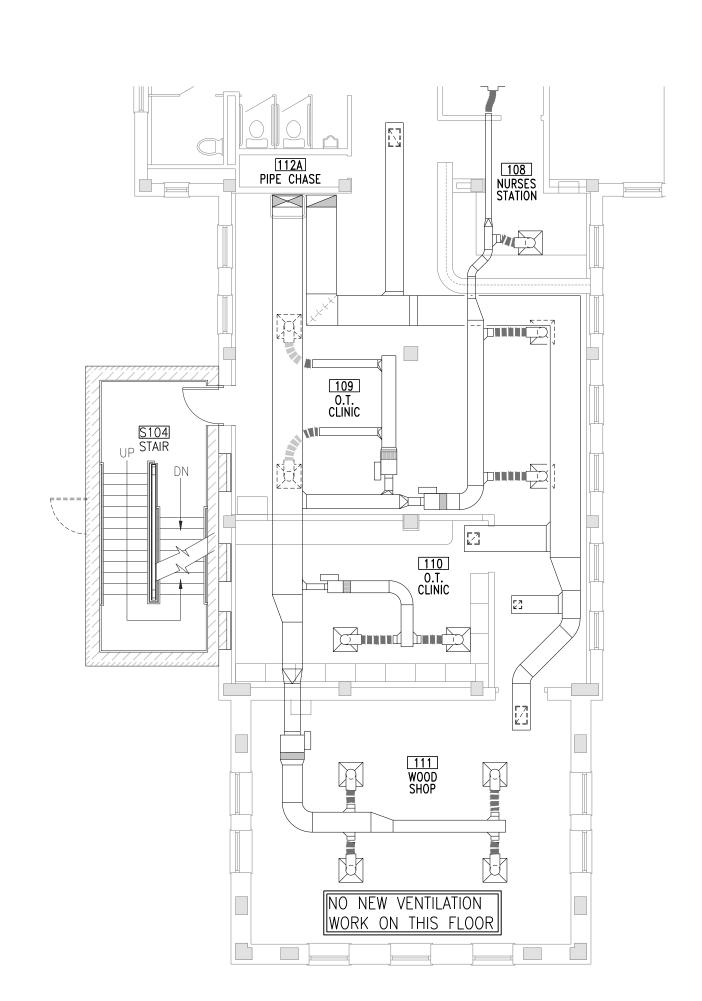


FIRST FLOOR VENTILATION DEMOLITION PLAN
1/8"=1'-0"

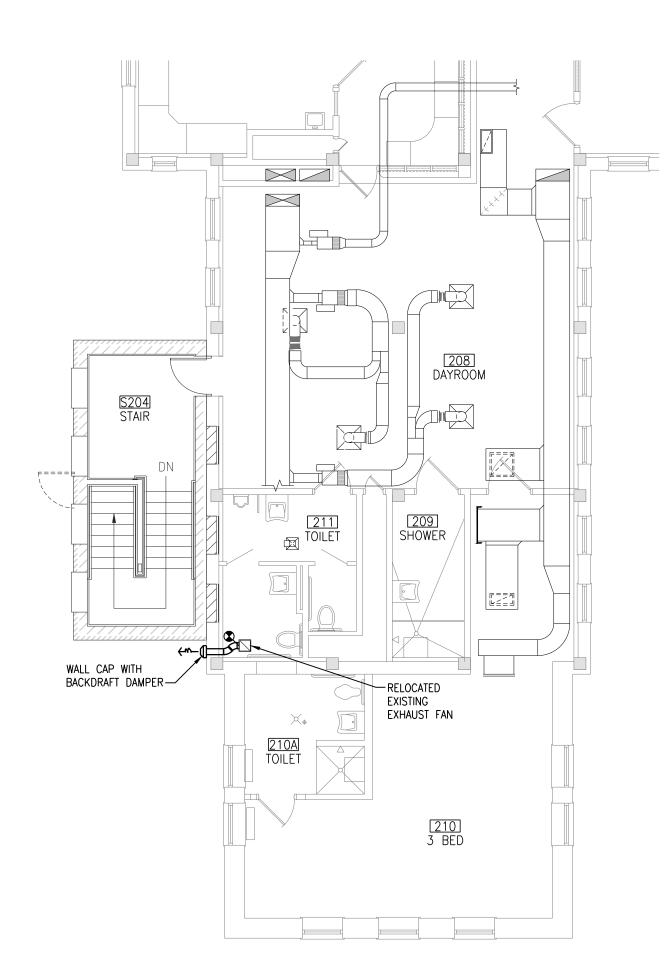


SECOND FLOOR VENTILATION DEMOLITION PLAN
1/8"=1'-0"

	VENTILATION DEMOLITION NOTES:
A.	DEMOLITION DRAWINGS ARE DIAGRAMMATIC ONLY AND ARE BASED ON FIELD OBSERVATION AND EXISTING RECORD DRAWINGS. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITIONS AND THESE DRAWINGS. PROVIDE ADDITIONAL DEMOLITION AS REQUIRED BASED ON FIELD CONDITIONS.
В.	THIS CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND RE-INSTALLING OF EXISTING CEILING TILE NOT REMOVED BY THE GENERAL CONTRACTOR FOR THE DEMOLITION OF EXISTING VENTILATION DUCTWORK, EQUIPMENT, ETC. VERIFY WITH ARCHITECTURAL PLANS FOR CEILING WORK BY THE GENERAL CONTRACTOR. ANY CEILING TILE OR GRID DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH NEW BY THIS CONTRACTOR.
C.	THIS CONTRACTOR SHALL OPEN ALL WALLS AND/OR CEILINGS FOR DEMOLITION OF EXISTING VENTILATION DUCTWORK, EQUIPMENT, ETC. AS REQUIRED.
D.	THIS CONTRACTOR IS RESPONSIBLE FOR PATCHING ALL HOLES/WALLS AND OR CEILINGS FROM DEMOLISHED VENTILATION DUCTWORK, EQUIPMENT, ETC. IN FLOORS, WALLS, AND CEILINGS TO MATCH EXISTING.
<u></u>	DISCONNECT AND REMOVE EXISTING DUCTWORK INCLUDING ALL ASSOCIATED SUPPORTS, INSULATION, ETC. CAP REMAINING DUCTWORK AT MAIN.
2	DISCONNECT AND REMOVE EXISTING OA INTAKE WALL CAP INCLUDING ALL ASSOCIATED DUCTWORK, SUPPORTS, ETC.
<u>3</u>	DISCONNECT AND REMOVE EXISTING DIFFUSER, REGISTER, OR GRILLE INCLUDING ALL ASSOCIATED DUCTWORK, SUPPORTS, INSULATION, ETC. CAP REMAINING DUCTWORK AT MAIN. MEASURE AND DOCUMENT AIR FLOW AT DIFFUSER PRIOR TO BEGINNING WORK.
4	DISCONNECT AND REMOVE EXISTING DIFFUSER, REGISTER, OR GRILLE. PREPARE REMAINING DUCTWORK FOR RE-CONNECTION. MEASURE AND DOCUMENT AIR FLOW AT DIFFUSER PRIOR TO BEGINNING WORK.
<u></u>	DISCONNECT AND REMOVE EXISTING FRESH AIR DUCTWORK INCLUDING ALL ASSOCIATED SUPPORTS, INSULATION, ETC. MEASURE OUTSIDE AIR FLOW VIA DUCT TRAVERSE PRIOR TO BEGINNING WORK.
6	MEASURE AND DOCUMENT AIR FLOW AT DIFFUSER PRIOR TO BEGINNING WORK.



FIRST FLOOR VENTILATION REMODELING PLAN
1/8"=1'-0"



SECOND FLOOR VENTILATION REMODELING PLAN
1/8"=1'-0"

	<u>VENTILATION NOTES:</u>
A.	CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITIONS AND THESE DRAWINGS.
В.	COORDINATE ALL DUCTWORK INSTALLATION WITH GENERAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL CONTRACTORS. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE. PROVIDE ALL NECESSARY OFFSETS (DROPS AND RISES) TO KEEP DUCTWORK TIGHT TO THE STRUCTURE ABOVE AND INSTALLATION BY ALL TRADES. OFFSET DUCTWORK TO AVOID BEAMS.
C.	REFER TO AND COORDINATE WITH THE ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS, SOFFIT AREAS, AND ELEVATIONS FOR INSTALLATION OF NEW VENTILATION DUCTWORK, EQUIPMENT, ETC.
D.	THIS CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND RE-INSTALLING OF EXISTING CEILING TILE NOT REMOVED BY THE GENERAL CONTRACTOR FOR THE INSTALLATION OF NEW VENTILATION DUCTWORK, EQUIPMENT, ETC. VERIFY WITH ARCHITECTURAL PLANS FOR CEILING WORK BY THE GENERAL CONTRACTOR. ANY CEILING TILE OR GRID DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH NEW BY THIS CONTRACTOR.
E.	THIS CONTRACTOR SHALL OPEN ALL EXISTING WALLS AND/OR CEILINGS FOR INSTALLATION OF NEW VENTILATION DUCTWORK, EQUIPMENT, ETC. AS REQUIRED. PATCH WALLS AND/OR CEILINGS TO MATCH EXISTING.
F.	MAINTAIN 3'-0" CLEAR SPACE IN FRONT OF ALL ELECTRICAL, CONTROL, AND ACCESS PANELS FOR ACCESSIBILITY.
G.	ALL DAMPERS, ETC SHALL BE INSTALLED IN ACCESSIBLE CEILINGS.
Н.	ALL OPEN ENDS OF DUCTS SHALL BE CAPPED AT THE END OF CONSTRUCTION EACH DAY.
I.	ALL VAV BOXES, TERMINAL COILS, ETC SHALL BE LOCATED AS ACCESSIBLE AS POSSIBLE TO THE CONTROLLED DEVICE.



HIGH EFFICIENCY TAKE-OFF SEALED AIR

TIGHT (SPIN-INS NOT

SUPPLY DUCT TO DIFFUSER DETAIL

TETURN AIR/
EXHAUST PLENUM

HIGH EFFICIENCY TAKE-OFF

RIGID OR FLEXIBLE

1. MAXIMUM FLEX DUCT LENGTH ALLOWED: 6'-( 2. SUPPORT FLEX DUCT EVERY 3'-0" 3. SPIN-INS OR CONICAL TAKE-OFFS ARE NOT ALLOWED

4. DIFFUSERS SHALL HAVE SQUARE NECKS. ROUND NECK DIFFUSERS NOT ALLOWED.

RIGID OR FLEXIBLE DUCT AS
INDICATED ON THE PLAN.
PLAN
INDICATED ON THE PLAN.
PLAN
INDICATED ON THE PLAN.

1. MAXIMUM FLEX DUCT LENGTH ALLOWED: 6'-0"
2. SUPPORT FLEX DUCT EVERY 3'-0"
3. SPIN-INS OR CONICAL TAKE-OFFS ARE NOT ALLOWED

4. SEAL ALL DUCT CONNECTIONS AIR TIGHT.

5. SEAL ALL FLEXIBLE DUCT CONNECTIONS AIR TIGHT WITH DUCT SEALER AS PER SPECIFICATIONS. DUCT TAPE IS NOT ALLOWED.

DUCT AS REQUIRED

<u>PLAN</u>

ON TOP OF DIFFUSER

12" HIGH SQUARE BOOT ON

SECTION TOP OF DIFFUSER

NO SCALE

OPTIONAL SIDE OUTLET —

SIDE VIEW

GRILLE SEE SCHEDULE

NO SCALE

PLENUM W/ROUND COLLAR——— SECURE PLENUM TO GRILLE

RIGID ELBOW ----

CEILING DIFFUSER —

SQUARE ELBOW WITH TURNING VANES

ROUND TO SQ. COLLAR CONNECTION

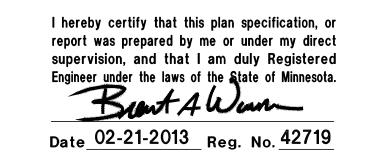
CEILING DIFFUSER

INSULATED FLEXIBLE DUCT

COLLAR CONNECTION MAX. 3" OFFSET







APPROVED: SERVICE LINE DIRECTOR	DATE:	APPROVED: INFECTION CONTROL NURSE	DATE:	VENTIL
APPROVED: SERVICE LINE DIRECTOR	DATE:	APPROVED: PATIENT SAFETY	DATE:	REMODE
APPROVED: PROJECTS SECTION MANAGER	DATE:	APPROVED: CHIEF OF POLICE	DATE:	APPROVED: (
APPROVED: DIRECTOR FMS	DATE:	APPROVED: SAFETY MANAGER	DATE:	APPROVED: 1

TITLE		PROJECT TITLE	DATE 21 2012	
ILATION DEMOLITION AND DELING PLANS		BUILDING 28 SOUTHWEST STAIR TOWER ADDITION	PLOT SCALE AS SHOWN PROJECT NO. 2012194	
): CHIEF OF STAFF	DATE:	BUILDING No CHECKED BY DRAWN MW	<b>CAD FILE</b> 2012194-H2.DWG	
D: MEDICAL CENTER DIRECTOR	DATE:	LOCATION VA MEDICAL CENTER ST.CLOUD, MN 56303	DRAWING NO.	VAMC SAINT CLOUD MN